



# MOHAWK

## Local School District

*Preparing today's students for tomorrow's challenges*

### Mohawk Local Schools      Grade 4<sup>th</sup> SCIENCE

### Quarter 4      Curriculum Guide

#### Guiding Principles of the Scientific Inquiry/Learning Cycle:

Evaluate...Engage...Explore...Explain...Extend...Evaluate

- Identify ask valid and testable questions
- Research books, other resources to gather known information
- Plan and Investigate
- Use appropriate mathematics, technology tools to gather, interpret data.
- Organize, evaluate, interpret observations, measurements, other data
- Use evidence, scientific knowledge to develop explanations
- Communicate results with graphs charts, tables

#### Critical Areas of Focus Being Addressed:

- Earth's Surface
- Electricity, Heat, and Matter
- Earth's Living History
- Scientific Inquiry and Application

Content Statements Addressed and Whether they are Knowledge, Reasoning, Performance Skill, or Product:  
 (DOK1)      (DOK2)      (DOK3)      (DOK4)

Underpinning Targets Corresponding with Standards and Whether they are Knowledge, Reasoning, Performance Skill, or Product: "I can.....", "Students Will Be Able To....."

The total amount of matter is conserved when it undergoes a change (DOK2)

The students can explain that matter remains constant when it undergoes a change (based on experimental experiences).

	<p>(DOK2) The students can explain that when an object is broken into smaller pieces, the total amount of matter remains constant.</p> <p>(DOK2) The students can explain that when a solid is dissolved in a liquid, the total amount of matter remains constant. (DOK2)</p> <p>The students can explain that when matter changes state (solid, liquid, gas), the total amount of matter remains constant. (DOK2)</p> <p>The students can explain that the sum of all of the parts in an object equals the mass of the object.(DOK2)</p>
<p>Energy can be transformed from one form to another or can be transferred from one location to another. (DOK2)</p>	<p>The students can observe situations, conduct demonstrations, and record data about energy transfer from hot objects to cold objects as heat, resulting in a temperature change.(DOK3)</p> <p>The students can make predictions about the heat conductivity of different materials.(DOK2)</p> <p>The students can demonstrate and explain that electric circuits require a complete loop of conducting materials through which electrical energy can be transferred. (DOK2)</p> <p>The students can demonstrate and explain how electrical energy in circuits can be transformed to other forms of energy, including light, heat, sound and motion. (DOK3)</p> <p>The students can demonstrate and explain that when a wire conducts electricity, the wire has magnetic properties and can push and/or pull magnets.(DOK3)</p>

